

References

Abdoul H, Mallet V, Pol S, Fontanet A (2008): Serum alpha-fetoprotein predicts treatment outcome in chronic hepatitis C patients regardless of HCV genotype. *J Hepatol*; 3(6):2391.

Abelev, GI., Eraiser, TL (2000): Cellular aspects of alpha fetoprotein reexpression in tumors. *Semin Cancer Biol.*; 32:225-237.

Aderson BB, Ukah F, Tette A and villarlor SG (1999): Primary tumors of a liver, *J National Med Assoc*, 84 (20): 129-135.

Afdahl N, Godofsky E, Dienstag JL, Rustgi V, Schick L, McEniry D (2004): Final phase/ trial results for NM283, a new polymerase inhibitor for hepatitis C: antiviral efficacy and tolerance in patients with HCV-infection, including previous interferon failures. *Hepatology*; 40: 726A.

Ajiki w, Tanaka H. and Tsukuma H.(2005): Liver cancer and its prevention. *Asian Pac j Cancer prev.*;6 (3); 244-250.

Alavian SM, Mehdi Hosseini-Moghaddam SM, Rahnavardi M (2007): Hepatitis C Patients: A Review on Epidemiologic, Diagnostic, and Therapeutic Features. *Hepatitis Monthly*. (3): 153-162.

Alberti A, Chemello L, Benvegna L (1999): Natural history of hepatitis C. *J Hepatol* ;31(suppl 1):17–24.

Alter MJ. Epidemiology of hepatitis C (1997): *Hepatology* ; 26: S62–5

Alter MJ (2007): Epidemiology of hepatitis C virus infection. *World J Gastroenterol* 13: 2436-2441.

Alter MJ, Margolis HS, Krawczynski K et al (1992): The natural history of community-acquired hepatitis C in the United States. The Sentinel Counties Chronic non-A, non-B Hepatitis Study Team. *N. Engl. J. Med.*; 327: 1899–1905.

Alter HJ, Purcell RH, Shih JW et al (1989): Detection of antibody to hepatitis C virus in prospectively followed transfusion recipients with acute and chronic non-A, non-B hepatitis. *N. Engl. J. Med.*; **321**: 1494–1500.

Alter MJ, Kruszon-Moran D, Nainan OV, et al (1999): The prevalence of hepatitis C virus infection in the United States, 1988 through 1994. *N Engl J Med* ;341:556–62.

Alter H.J, Seeff L.B (2000): Recovery, persistence, and sequelae in hepatitis C virus infection: a perspective on long-term outcome. *Semin Liver Dis.*; 20(1):17–35.

Angelico, M., E. Renganathan, C. Gandin, M. Fathy, M. C. Profili, W. Refai, A. De Santis, A. Nagi, G. Amin, L. Capocaccia, F. Callea, M. Rapicetta, G. Badr, and G. Rocchi (1997): Chronic liver disease in the Alexandria governorate, Egypt: contribution of schistosomiasis and hepatitis virus infections. *J. Hepatol.*; 26: 236-243.

Anzola M (2004): Hepatocellular Carcinoma: Role of Hepatitis B and Hepatitis C viruses proteins in Hepatocarcinogenesis. *J Viral Hepat*, 11 (5): 383-393.

- Bader D, Riskin A, Vafsi O, et al. (2004):** Alpha-fetoprotein in the early neonatal period--a large study and review of the literature. *Clin. Chim. Acta* 349 (1-2): 15–23.
- Bae J.S., Park S.J., Park K.B., Paik S.Y., Ryu J.K., Choi C.K. and Hwang T.J (2005):** Acute exacerbation of hepatitis in liver cirrhosis with very high levels of AFP but no occurrence of hepatocellular carcinoma. *Korean J Intern Med.* 20(1): 80-85.
- Bassett SE, Brasky KM, Lanford RE. (1998):** Analysis of hepatitis C virus-inoculated chimpanzees reveals unexpected clinical profiles. *J. Virol.* ; 72: 2589–99
- Bates SE and Longo DL (2000):** Use of serum tumor markers in cancer diagnosis and management, *Semin, oncol* 14:102-138.
- Bayati N, Silverman AL, Gordon SC (1998):** Serum alpha-fetoprotein levels and liver histology in patients with chronic hepatitis C. *Am J Gastroenterol* ; 93:2452-2456.
- Bellet D. H., Wands J. R., Isselbacher K. J., and Bohuon C. (1984):** Serum AFP levels in Human Disease: Perspective from a Highly Specific Monoclonal Radioimmunoassay. *National Academy of Sciences;* 81(12):3869-3873
- Berg T, Sarrazin C, Herrmann E, Hinrichsen H, Gerlach T, et al. (2003):** Prediction of treatment outcome in patients with chronic hepatitis C: significance of baseline parameters and viral dynamics during therapy. *Hepatology* 37: 600–9.
- Berman M, Alter HJ, Ishak KG (2000):** The chronic sequelae of non-A, non-B hepatitis. *Ann Intern Med* 91:1.

Bertoletti A, Ferrari C (2003): Kinetics of the immune response during HBV and HCV infection. *Hepatology*; 38: 4-13.

Blohm ME, Vesterling-Hörner D, Calaminus G, Göbel U (1998): Alpha 1-fetoprotein (AFP) reference values in infants up to 2 years of age. *Pediatr Hematol Oncol* 15 (2): 135–42.

Bralet, M. P, J. M. Regimbeau, P. Pineau, S. Dubois, G. Loas, F. Degos, et al. (2000): Hepatocellular carcinoma occurring in nonfibrotic liver: epidemiologic and histopathologic analysis of 80 French cases. *Hepatology*; 32(2): 200-204.

Bruix J, Barrera JM, Calvet X et al (1989): Prevalence of antibodies to hepatitis C virus in Spanish patients with hepatocellular carcinomahepatic cirrhosis. *Lancet* ; 2: 1004–6.

Brummund W, Arvon DA, Mennutic MT and Starkousky NA (2002): Alpha-fetoprotein in the routine clinical laboratory: Evaluation of a simple radio-immuno assay and review of current concepts in its clinical application. *Clin Chim Acta*, 105: 25-39.

Bruno S, Silini E, Crosignani A, et al (1997): Hepatitis C virus genotypes and risk of hepatocellular carcinoma in cirrhosis: a prospective study. *Hepatology* ;25:754–8.

Bukh J, Miller R.H, Purcell R.H(1995):. Genetic heterogeneity of hepatitis C virus: quasispecies and genotypes. *Semin Liver Dis.*;15 (1):41–63.

Bullen AW, Losowsky MS, Conter S, Patels and Munro A (1998):

Diagnostic usefulness of serum AFP level in acute and chronic liver diseases. *Gastroenterology*; 73:673-678.

Butch A.W, Massoll N.A, Pappas A (2000): Tumor markers. In: clinical chemistry (principle, procedure, correlation), 4th edition edited by Bishop M L, Duben-Engelkirk J L, Fody EP.pub. By Lippincott Williams and Wilkins, Philadelphia, NewYork, London, Hong Kong, Sedney, Tokyo, p: 522-539.

Burt RW, Ratcliffe JG, Stack BHR (2001): Serum biochemical markers in liver cancer. *Br J cancer*, 37:714.

Cadranel JF, Rufat P, Degos F. (2000): Practices of liver biopsy in France: results of a prospective nationwide survey. *Hepatology*; 32: 477–81.

Carrat F, Bani-Sadr F, Pol S, Rosenthal E, Lunel-Fabiani F, Benzekri A, et al (2004): Pegylated interferon alfa-2b vs standard interferon alfa-2b, plus ribavirin, for chronic hepatitis C in HIV-infected patients: a randomized controlled trial. *JAMA*; 292:2839-2848.

Cedron A., Covino M., Caturelli E., Pompili M., Lorenzelli G., Villani I., Valle D., Sperandeo M., Rapaccini G.L. and Gasbarrini G (2000): Utility of AFP in the screening of patients with virus-related chronic liver disease: does different viral etiology influence AFP levels in HCC? A study in 350 western patients. *Hepatogastroenterology*, 2000, 47 (36): 1654-1658.

Chan D. W and Sell S (1999): Tumor markers. In: Teitz Textbook of clinical chemistry. Third Edition by Burtis C. A. and Ashwood E. R., W. B. Saunders company, Ch. 23, p: 722.

Chen DS and Sang JC (2000): Serum alpha-fetoprotein in early stage of human hepatocellular carcinoma. *Gastroenterology*; 86:1404.

Chen TM, Huang PT, Tsai MH, Lin LF, Liu CC, Ho KS, Siau CP, Chao PL, Tung JN (2008): Predictors of alpha-fetoprotein elevation in patients with chronic hepatitis C, but not hepatocellular carcinoma, and its normalization after pegylated interferon alfa 2a-ribavirin combination therapy. *J Gastroenterol Hepatol.* ;22(5):669-75.

Chevaliez S, Brillet R, Lazaro E, Hezode C, Pawlotsky J (2007): Analysis of Ribavirin Mutagenicity in Human Hepatitis C Virus Infection. *J Virology*; 81(14): 7732-7741.

Choo QL, Kuo G, Weiner AJ, Overby LR, Bradley DW, Houghton M (1989): Isolation of a cDNA clone derived from a bloodborne non-A, non-B viral hepatitis genome. *Science* ; **244**: 359–62.

Chu CW, Hwang SJ, Luo JC, Lai CR, Tsay SH, Li CP, et al (2001): Clinical, virologic, and pathologic significance of elevated serum alpha-fetoprotein levels in patients with chronic hepatitis C. *J Clin Gastroenterol* ; 32:240-244.

Clinical Chemistry j (2010); 56:e1-e48

Comanor L, Elkin C, Leung K, Krajden M, Kronquist K, Nicolas K, Horansky E, deMedina M, Kittichai P, Sablon E, Ziermann R, Sherlock C (2003) Successful HCV genotyping of previously failed and low viral load specimens using an HCV RNA qualitative assay based on

transcription-mediated amplification in conjunction with the line probe assay. *J Clin Virol* 28:14–26.

Cottone, M., Turri, M., Caltagirone, M., Maringhini, A., Sciarrino, E. and Virdone, R (1988): Early detection of hepatocellular carcinoma associated with cirrhosis by ultrasound and alpha-fetoprotein: a prospective study. *Hepatogastroenterology*; 35: 101-103.

Craxi A, Licata A (2006): Acute hepatitis C: in search of the optimal approach to cure. *Hepatology*; 43: 221-224.

Crocoli A, Madafferi S, Jenkner A, Zaccara A, Inserra A (2007): Elevated serum alpha-fetoprotein in Wilms tumor may follow the same pattern of other fetal neoplasms after treatment: evidence from three cases. *Pediatr Surg Int* 24: 499.

Davis GL. (2002): Monitoring of viral levels during therapy of hepatitis C. *Hepatology*; 36: S145-S151.

Dengniery, David V. and Brissot P (2002): Serum AFP as a marker for diagnosis of primary hepatic car. *Hepatology*; 4: 889-892.

Deutsch HF (1991): Chemistry and biology of alpha-fetoprotein. *Adv Cancer Res.*;56:253-312.

Di Bisceglie AM, Sterling RK, Chung RT, Everhart JE, Dienstag JL, Bonkovsky HL, et al (2005): Serum alpha-fetoprotein levels in patients with advanced hepatitis C: results from the HALT-C trial. *J Hepatol* ; 43:434-441.

Donato F, Tagger A, Gelatti U, et al (2002): Alcohol and hepatocellular carcinoma: the effect of lifetime intake and hepatitis virus infections in men and women. *Am J Epidemiol*;155:323–31

Dubuisson J (2007): "Hepatitis C virus proteins". *World J. Gastroenterol.* **13** (17): 2406–15.

Dubuisson J, Op De Beeck A, (2003): "Topology of hepatitis C virus envelope glycoproteins". *Rev. Med. Virol.* **13** (4): 233–41..

Duffy MJ (2004): "Evidence for the clinical use of tumour markers". *Ann. Clin. Biochem.* **41** (Pt 5): 370–7.

Duffy MJ, Crown J (2008): "A personalized approach to cancer treatment: how biomarkers can help". *Clin. Chem.* **54** (11): 1770–9.

Dusheiko, G., H. Schmilovitz-Weiss, D. Brown, F. McOmish, P. L. Yap, S. Sherlock, N. McIntyre, and P. Simmonds. (1994): Hepatitis C virus genotypes: an investigation of type-specific differences in geographic origin and disease. *Hepatology*,; 19: 13-18.

EASL, (1999): International Consensus Conference on Hepatitis C. Consensus Statement. *J. Hepatol.*, 31: 3-8.

El Refaie, A., Savage, K., Bhallacharya, S., Khakoo, S., Harrison, T. and Elbastanomy, M. (1996): HCV associated hepatocellular carcinoma without cirrhosis. *J. Hepatol.*; 24: 277-285.

El-Serag HB (2002): Hepatocellular carcinoma and hepatitis C in the United States. *Hepatology* ;36(suppl 1):S74–83.

Esteban JI, Lopez-Talavera JC, Genesca J et al (1991): High rate of infectivity and liver disease in blood donors with antibodies to hepatitis C virus. *Ann. Intern. Med.* **115**: 443–9.

Farci P, Alter HJ, Shimoda A et al (1996): Hepatitis C virus-associated fulminant hepatic failure. *N. Engl. J. Med.* ; **335**: 631–4.

Farci P, Alter HJ, Wong DC et al (1994): Prevention of hepatitis C virus infection in chimpanzees after antibody-mediated in vitro neutralization. *Proc. Natl Acad. Sci. USA*; **91**: 7792–6.

Farci P, Shimoda A, Coiana A et al (2000): The outcome of acute hepatitis C predicted by the evolution of the viral quasispecies. *Science* ; 288: 339-344.

Fontana RJ, Lok AS (2002):non-invasive monitoring of patients with chronic hepatitis C. *Hepatology*; 36:557-64.

Fontana RJ, Hussain KB, Schwartz SM, et al (2002): Emotional distress in chronic hepatitis C patients not receiving antiviral therapy, *J Hepatology*; 36:401-7.

Frank C, Mohamed M, Strickland G, Lavanchy D, Arthur R, Magder L, El Khoby T, Abdel-Wahab Y, Aly Ohn E, Anwar W, Sallam I (2000): "The role of parenteral antischistosomal therapy in the spread of hepatitis C virus in Egypt.". *Lancet* 355 (9207): 887–91.

Freeman AJ, Dore GJ, Law MG et al (2001): Estimating progression to cirrhosis in chronic hepatitis C virus infection. *Hepatology*; 34:809-16.

- Funmei Yang, Judith M. Bergeron, Leslie A. Linehan, Peter A. Lalley, Alan Y. Sakaguchi and Barbara H. Bowman (1990):** Mapping and conservation of the group-specific component gene in mouse. *Genomics* ,7(4):509-516.
- Gebo KA, Chander G, Jenckes MW, et al (2002):** Screening tests for hepatocellular carcinoma in patients with chronic hepatitis C: a systematic review. *Hepatology*; 36 (suppl 1):S84–92.
- Ge D, Fellay J, Thompson AJ, et al. (2009):** "Genetic variation in IL28B predicts hepatitis C treatment-induced viral clearance". *Nature* 461 (7262): 399–401.
- Gitlin D and Boseman M (2002):** Fetus – specific serum proteins in several mammals and their relations to human AFP. *Camp biochem. Physiology*; 21: 327-336.
- Go VLW and Zamchech N (1998):** the role of tumour markers in the management of colorectal cancer. *cancer, (Phila)*, 50: 2618-2623.
- Gold P, Labitan A, Wong HCG, Freedman SO, Krupey J and Shuster J (2001):** Physiochemical approach to the purification of human from alpha-fetoprotein the ascitec fluid of hepatoma bearing patient. *Cancer research* 38: 3-12.
- Goldstein NS, Blue DE., Hankin R., Batati, N., Silverman AL., Gordon, SV. (1999):** Serum alpha-fetoprotein levels in patients with chronic hepatitis C. Relationship with alanine aminotransferase values,

histologic activity index and hepatocyte MIB-1 score, *Am. J. Clin. Pathol*; 111: 811-816.

Gorog D., Regoly-Merei J., Paku S., Kopper L. and Nagy P. (2005): AFP expression is a potential prognostic marker in hepatocellular carcinoma. *World J Gastroenterol*, 28;11(32): 5015-5018.

Gowans, E. J (2000): Distribution of markers of hepatitis C virus infection throughout the body. *Semin. Liver Dis.*, 20: 85–102.

Grakoui A, Wychowski C, Lin C, Feinstone SM, Rice CM. (1993): Expression and identification of hepatitis C virus polyprotein cleavage products. *J. Virol.* ; **67**: 1385–95.

Greenberg F, Faucett A, Rose E, et al. (1992): Congenital deficiency of alpha-fetoprotein. *Am. J. Obstet. Gynecol.* 167 (2): 509–11.

Gretch DR, Bacchi CE, Corey L et al (1995): Persistent hepatitis C virus infection after liver transplantation: clinical and virological features. *Hepatology* ; **22**: 1–9.

Guidotti LG, Rochford R, Chung J, Shapiro M, Purcell R, Chisari FV (1996): Viral clearance without destruction of infected cells during acute HBV infection. *Science*; **284**: 825–9.

Gupta S, Bent S, Kohlwes J (2003): Test characteristics of alpha-fetoprotein for detecting hepatocellular carcinoma in patients with hepatitis C. A systematic review and critical analysis. *Ann Intern Med* 139: 46–50.

Hadziyannis SJ, Sette H Jr, Morgan TR, et al (2004): Peginterferon-alpha2a and ribavirin combination therapy in chronic hepatitis C: a randomized study of treatment duration and ribavirin dose. *Ann Intern Med*; 140:346–55.

Hagiwara, H., Hayashi, N., Mita, E., Ueda, K., Takehara, T., Kasahara, A., Fusamoto, H. and Kamada, T. (1993): Quantitative analysis of hepatitis C virus RNA in serum during interferon- α therapy. *Gastroenterology*; 104: 877–883

Halbrecht I, Klibanski C (1956): Identification of new normal embryonic haemoglobin. *Nature* 178: 794–5.

Heller T, Rehmann B (2005): Acute hepatitis C: a multifaceted disease. *Semin Liver Dis* ; 25: 7-17.

Herrine SK (2002): Approach to the patient with chronic hepatitis C virus infection. *Ann Intern Med* ;136:747–57.

Hiari N , Nishi S Watabe H and Tsukada Y (1999): Some chemical, experimental and clinical investigations on alpha-fetoprotein and hepatoma (H. Hirai and T. Miyaji, eds.) *GANN Monograph N. 14*: 19-34.

Hladik W, Kataaha P, Mermin J, Purdy M, Otekati G, Lackritz E, Alter MJ, Downing R(2006). Prevalence and screening costs of hepatitis C virus among Ugandan blood donors. *Trop Med Int Health* 11: 951-954.

Hoofnagle JH. Hepatitis C: the clinical spectrum of disease (1997): Hepatology; 26(3 suppl 1):15S-20S.

Hoofnagle JH (2002): Course and outcome of hepatitis C. Hepatolog; 36 (5, suppl.1): S21-S29.

Houghton M, Abrignani S (2005):. Prospects for a vaccine against the hepatitis C virus. *Nature*; 436: 961-966

H.Terry Wepsic, Anita Kirkpatrick (1979): Alpha-fetoprotein and its relevance to human disease *Gastroenterology*; 77 (4) 787-796.

Hu KQ, Kyulo NL, Lim N, Elhazin B, Hillebrand DJ, Bock T (2004): Clinical significance of elevated alpha-fetoprotein (AFP) in patients with chronic hepatitis C, but not hepatocellular carcinoma. *Am J Gastroenterol* ; 99:860-865.

Hu KQ, Kyulo NL, Esrailian E, et al (2004): Overweight and obesity, hepatic steatosis, and progression of chronic hepatitis C: a retrospective study on a large cohort of patients in the United States. *J Hepatol*; 40:147–54.

Imazeki F, Yokosuka O, Fukai K, et al (2003): Favorable prognosis of chronic hepatitis C after interferon therapy by long-term cohort study. *Hepatology*; 38:493–502

Ishak K, Baptista A, Bianchi L et al (1995): Histological grading and staging of chronic hepatitis. *J Hepatol*; 22:696-9.

Johnson PJ (2001): The role of serum alpha-fetoprotein estimation in the diagnosis and management of hepatocellular carcinoma. *Clin Liver Dis.*; 5(1):145-59.

Jubin R (2001): "Hepatitis C IRES: translating translation into a therapeutic target". *Curr. Opin. Mol. Ther.* 3 (3): 278–87.

Kalantar-Zadeh K, Miller LG, Daar ES.(2005) Diagnostic discordance for hepatitis C virus infection in hemodialysis patients. *Am J Kidney Dis* 46: 290-300.

Kamal, S. M., M. A. Madwar, T. Peters, R. Fawzy, and J. Rasenack (2000): Interferon therapy in patients with chronic hepatitis C and schistosomiasis. *J. Hepatol.* 32:172-174

Kamal SM (2008): Acute hepatitis C: a systematic review. *The American Journal of Gastroenterology* 103 (5): 1283–97.

Karmochkine M, Carrat F, Dos Santos O, Cacoub P, Raguine G (2006):"A case-control study of risk factors for hepatitis C infection in patients with unexplained routes of infection". *J. Viral Hepat.* 13 (11):775-82.

Kato N (2000): "Genome of human hepatitis C virus (HCV): gene organization, sequence diversity, and variation". *Microb. Comp. Genomics* 5 (3): 129–51.

Kato N, Yokosuka O, Hosoda K, Ito Y, Ohto M, Omata M (1993):

Quantification of hepatitis C virus by competitive reverse transcription-polymerase chain reaction: increase of the virus in advanced liver disease. *Hepatology* ; **18**: 16–20.

Kato N, Ootsuyama Y, Sekiya H, Ohkoshi S, Nakazawa T,

Hijikata M, Shimotohno K. (1994): Genetic drift in hypervariable region 1 of the viral genome in persistent hepatitis C virus infection. *J. Virol.* ; **68**: 4776–84 .

Kamoto T, Satomura S, Yoshiki T, Okada Y, Henmi F, Nishiyama H,

Kobayashi T, Terai A, Habuchi T, Ogawa O (2002): Lectin-reactive alpha-fetoprotein (AFP-L3%) curability and prediction of clinical course after treatment of non-seminomatous germ cell tumors. *Jpn. J. Clin. Oncol.* 32 (11): 472–6.

Khan N, Aswad S, Shidban H, Aghajani M, Mendez R, Comanor L (2004) Improved detection of HCV infection in hemodialysis patients using a new HCV RNA qualitative assay: experience of a transplant center. *J Clin Virol* 30:175–182.

Khien V.V., Mao H. V., Chinh T.T., Ha P. T., Bang M.H., Lac B.V.,

Hop T.V., Tuan N.A., Don L.V., Taleka K. and Satomura S (2001):

Clinical evaluation of lentil lectin-reactive AFP-L-3 in histology-proven hepatocellular carcinoma. *Int J Biol Markers*.16(2): 105-111.

Khosla S, Hassoun AA, Baker BK, et al. (1998): Insulin-like growth factor system abnormalities in hepatitis C-associated osteosclerosis. Potential insights into increasing bone mass in adults. *J Clin Invest*; 101: 2165-2173

Kieffer T, Sarrazin C, Miller J, Traver S, Zhou Y, Bartels D, Hanzelka B, Müh U, Lin C, Reesink HW, Kwong A, Zeuzem S (2006): Combination of Telaprevir (VX-950) and PEG-IFN-ALFA suppresses both wild-type virus and resistance variants in HCV genotype 1-infected patients in a 14-day phase 1B study. *Hepatology*; 44: 222A92.

Kim do Y, Paik YH, Ahn SH, Youn YJ, Choi JW, Kim JK, Lee KS, Chon CY, Han KH (2007): "PIVKA-II is a useful tumor marker for recurrent hepatocellular carcinoma after surgical resection. *Oncology* 72 Suppl 1: 52–7.

Kinoshita Y, Tajiri T, Souzaki R, Tatsuta K, Higashi M, Izaki T, Takahashi Y, Taguchi T (June 2008): "Diagnostic value of lectin reactive alpha-fetoprotein for neoinfantile hepatic tumors and malignant germ cell tumors: preliminary study". *J. Pediatr. Hematol. Oncol.* **30** (6): 447–50.

Klenerman P, Lechner F, Kantzanou M, Ciurea A, Hengartner H, Zinkernagel R (2000): Viral escape and the failure of cellular immune responses. *Science* ; 289: 2003.

Kortez R, Abbey H, Coleman E, et al. (1993): Non-A, Non-B post-transfusion hepatitis. *Ann. Intern. Med*; 119: 110-115.

Krain A, Wisnivesky JP, Garland E, et al. (2004): Prevalence of human immunodeficiency virus testing in patients with hepatitis B and C infection. *Mayo Clin Proc*; 79:51–6.

Kuo G, Choo Q, Alter H, Gitnick G, Redeker A, Purcell R, Miyamura T, Dienstag J, Alter M, Stevens C (1989): "An assay for

circulating antibodies to a major etiologic virus of human non-A, non-B hepatitis.". *Science* **244** (4902): 362–4.

Kudo (2006): Early detection and characterization of hepatocellular carcinoma: value of imaging multistep human hepatocarcinogenesis. *Intervirology* 49 (1-2): 64-69.

Kumada T., Nakano S., Takeda I., Kiriyaama S., Sone Y., Hayashi K., Katoh H., Endoh T., Sassa T. and Satomura S (1999): Clinical utility of agglutinin-reactive alpha-fetoprotein in small hepatocellular carcinoma: Special reference to imaging diagnosis. *Journal of Hepatology*; 30: 125-130.

Laskus T, Wang LF, Radkowski M, Vargas H, Nowicki M, Wilkinson J, Rakela J. (2001):"Exposure of hepatitis C virus (HCV) RNA-positive recipients to HCV RNA-positive blood donors results in rapid predominance of a single donor strain and exclusion and/or suppression of the recipient strain". *Journal of virology* 75 (5): 2059–66.

Lauer GM, Walker BD (2001): Hepatitis C virus infection. *N Engl J Med*; 345:41–52.

Lee PI, Chang MH, Chen DS, Lee CY (January 1989): "Serum alpha-fetoprotein levels in normal infants: a reappraisal of regression analysis and sex difference". *J. Pediatr. Gastroenterol. Nutr.* 8 (1): 19–25.

Li MS, Li PF, Yang FY, He SP, Du GG, Li G (2002b): The intracellular mechanism of alpha-fetoprotein promoting the proliferation of NIH 3T3 cells. *Cell Res.*;12(2):151-6.

Liang TJ, Rehermann B, Seeff LB, Hoofnagle JH (2000):

Pathogenesis, natural history, treatment, and prevention of hepatitis C. *Ann. Intern. Med.*; 132: 296–305.

Liaw YF, Chen JJ, Chen TJ. (1990): Acute exacerbation in patients with liver cirrhosis: a clinicopathological study, *Liver*; 10: 177-184.

Lichenstein HS, Lyons DE, Wurfel MM, Johnson DA, McGinley MD, Leidli JC, Trollinger DB, Mayer JP, Wright SD, Zukowski MM (1994): Afamin is a new member of the albumin, alpha-fetoprotein, and vitamin D-binding protein gene family. *J Biol Chem.*; 269(27):18149-54.

Maertens G, Stuyver L (1997): Genotypes and Genetic Variation of Hepatitis C Virus. *The Molecular Medicine of viral Hepatitis*. Chichester, England, John Wiley.

Major ME, Feinstone SM (1997): The molecular virology of hepatitis C. *Hepatology*; 25: 1527–38.

Major ME, Mihalik K, Fernandez J et al (1999): Long-term follow-up of chimpanzees inoculated with the first infectious clone for hepatitis C virus. *J. Virol.*; 73: 3317–25.

Males S, Raafat Gad R, Esmat G, Abobakr H, Anwar M, et al (2007): Serum alpha foetoprotein level predicts treatment outcome in chronic hepatitis C. *Antiviral Therapy.* ; 12:797–803.

Manns MP, McHutchison JG, Gordon SC, et al (2001): Peginterferon alfa-2b plus ribavirin compared with interferon alfa-2b plus ribavirin for

initial treatment of chronic hepatitis C: a randomised trial. *Lancet*; 358:958–65.

Martel M, Esteban JI, Quer J, Genesca J, Weiner A, Esteban R, et al (1992): Hepatitis C virus (HCV) circulates as a population of different but closely related genomes: quasispecies nature of HCV genome distribution. *J Virol* ; 66: 3225-9.

Marreno J.A., Su G.L., Wei W., Emick D., Conjeevaram H.S., Fontana R.J. and Lok A.S (2003): DCP can differentiate HCC from nonmalignant chronic liver disease in American patients. *Hepatology*, 37: 1114-1121.

Mast EE, Hwang LY, Seto DS, Nolte FS, Nainan OV, Wurtzel H, Alter MJ(2005). Risk factors for perinatal transmission of hepatitis C virus (HCV) and the natural history of HCV infection acquired in infancy. *J Infect Dis* 192: 1880-1889.

McDonald J, Jayasuriya J, Bindley P, Gonsalvez C, Gluseska S (2002): Fatigue and psychological disorders in chronic hepatitis C. *J Gastroenterol Hepatol*; 17(2):171-6.

McHutchison JG, Bartenschlager R, Patel K, Pawlotsky JM (2006): The face of future hepatitis C antiviral drug development: recent biological and virologic advances and their translation to drug development and clinical practice. *J Hepatology*; 44: 411-421.

Mc Mahon B.J and London T. (1991): Workshop on screening for hepatocellular carcinoma. *J. Natl. Cancer Inst.* 83: 916.

Mizejewski GJ (2003): Levels of alpha-fetoprotein during pregnancy and early infancy in normal and disease states. *Obstet Gynecol Surv*, 58:804-826.

Mizejewski GJ (2001): alpha-fetoprotein as a biologic response modifier: relevance to domain and subdomain structure. *Proc Soc Exp Biol Med*. Sep; 215(4):333-62.

Mohamed M. K., Abdelhamid M., Mikhail N.N., Abdel-Aziz F., Medhat A., Magder L., S., Fix A. D. and Strickland G. T. (2005): Intrafamilial Transmission of Hepatitis C in Egypt. *Hepatology*, 42(3): 683-687.

Mohamed MK(2004). Epidemiology of HCV in Egypt 2004.The Afro-Arab Liver Journal, vol 3, No2,(July), pp 41-52.

Mondelli MU, Cerino A, Cividini A (2005): Acute hepatitis C: diagnosis and management. *J Hepatol* ; 42 Suppl(9):S108-14.

Mosmann TR, Sad S (1996): The expanding universe of T-cell subsets: Th1, Th2 and more. *Immunol. Today*; 17: 138–46.

Mutsumori A, Ohashi N, Hasegawa K, et al. (1998): Hepatitis C virus infection and heart diseases: a multicentric study in Japan. *Jpn Circ J*; 62: 389-391.

Nakata, K., Motomura, M., Nakabayashi, H., et al. (1992): A possible mechanism of in verse development regulation of alpha-fetoprotein and albumin genes. *J. Biol. Chem.*, 267: 1331-1334..

Neumann AU. et al (1998): Hepatitis C viral dynamics in vivo and the antiviral efficacy of interferon-alpha therapy. *Science*;282(5386):103–7.

Ngo Y, Munteanu M, Messous D, Charlotte F, Imbert-Bismut F, Thabut D, Lebray P, Thibault V, Benhamou Y, Moussalli J, Ratziu V, Poynard T (2006): A prospective analysis of the prognostic value of biomarkers (FibroTest) in patients with chronic hepatitis C. *Clin Chem* 52 (10): 1887–96.

NTP (2003): Report on Carcinogens Background Document for Hepatitis C. National Toxicology Program. 2003

Ohguchi, S., Nakatsukasa, H., Higashi, T., et al. (1998): Expression of α -fetoprotein and albumin in human hepatocellular carcinomas: limitations in the application of the genes for targeting human hepatocellular carcinoma in gene therapy. *Hepatology*; 27: 599-706.

Ohto H, Terazawa S, Sasaki N et al (1994): Transmission of hepatitis C virus from mothers to infants. The Vertical Transmission of Hepatitis C Virus Collaborative Study Group. *N. Engl. J. Med.* ; 330: 744–50.

Oka H., Tamori A., Kuroki T. Kobayashi K. and Yamamoto S. (1993): Prospective study of alpha-fetoprotein in cirrhotic patients monitored for development of hepatocellular carcinoma. *Hepatology*; 19 (1):61-66.

Orland JR, Wright TL, Cooper S (2001): Acute hepatitis C. *Hepatology*; 33: 321-327.

Pariante CM, Orru MG, Baita A, et al (1999): Treatment with interferon-alpha in patients with chronic hepatitis and mood or anxiety disorders. *Lancet* ;354:131–2.

Paul SB, Gulati MS, Sreenivas V, Madan K, Gupta AK, Mukhopadhyay S, Acharya SK (2007): Evaluating patients with cirrhosis for hepatocellular carcinoma: value of clinical symptomatology, imaging and alpha-fetoprotein. *Oncology* 72 Suppl 1: 117–23.

Perz JF, Armstrong GL, Farrington LA, Hutin YJ, Bell BP(2006). The contributions of hepatitis B virus and hepatitis C virus infections to cirrhosis and primary liver cancer worldwide. *J Hepatol* 45: 529-538.

Peters MG, Terrault NA (2002): Alcohol use and hepatitis C. *Hepatology* ;36(suppl 1):S220–5.

Poynard T, McHutchison J, Goodman Z, Ling MH, Albrecht J (2000): Is an “a la carte” combination interferon alfa-2b plus ribavirin regimen possible for the first line treatment in patients with chronic hepatitis C? The ALGOVIRC Project Group. *Hepatology* 31: 211–8

Poynard T, Yuen MF, Ratziu V, et al (2003): *Lancet* ;362:2095–100.

Poynard T, Bedossa P, Opolon P (1997): for the OBSVIRC, METAVIR, CLINIVIR, and DOSVIRC groups. Natural history of liver fibrosis progression in patients with chronic hepatitis C. *Lancet*; 349: 825–32.

Pratt DS, Kaplan MM. (2000): Evaluation of abnormal liver-enzyme results in asymptomatic patients. *N Engl J Med*;342(17): 1266-71.

Rebischung C, Pautier P, Morice P, Lhomme C, Duvillard P (2000): lpha-fetoprotein production by a malignant mixed Müllerian tumor of the ovary. *Gynecol. Oncol.* 77 (1): 203–5.

Rehermann B, Nascimbeni M (2005): Immunology of hepatitis B virus and hepatitis C virus infection. *Nat Rev Immunol* ; 5:215-229.

Roberts EA and Yeung L(2002). Maternal-infant transmission of hepatitis C virus infection. *Hepatology* 36: S106-S113.

Rodés J and Sánchez Tapias JM (2000):Hepatitis C. *Nephrol Dial Transplant*;15(suppl 8):2-11 .

Rodger AJ, Roberts S, Lanigan A et al (2000): Assessment of long term outcomes of community acquired hepatitis C infection in a cohort with sera stored from 1971 to 1975. *Hepatology*; 32: 582-587.

Sadek A, Abdel-Hady, El-Zyat A (1997): Alpha-fetoprotein and albumin in ascitic fluid in hepatocellular carcinoma patients J. *Egypt. Soc. Parasito.*, , 2: 455-464.

Sarobe P, Lasarte JJ, Garcia N et al (2006): Characterization of T- cell responses against immunodominant epitopes from hepatitis C virus E2 and NS4a proteins. *J Viral Hepat* : 47-55.

Schiodt FV, Ostapowicz G, Murray N, et al (2006): Alpha-fetoprotein and prognosis in acute liver failure. *Liver Transpl*; 12(12):1776-81.

- Schreiber GB, Busch MP, Kleinman SH, et al (1996):** The risk of transfusion transmitted viral infections. The retrovirus epidemiology donor study. *N Engl J Med*;334:1685–90.
- Schneiders AM, Schulz M, Leifeld L et al (2000):** E2 antibodies mediate antibody dependent cellular cytotoxicity in HCV. *J. Hepatol*; 32 (Suppl.): 37.
- Schwartz M.K (2002) :** Tumor markers. In: clinical chemistry laboratory management and clinical correlation. Ed. Lewandrowski: K.A Wolters Kluwer company, 2002, ch.56.p: 865-876.
- Seeff L.B. et al (2001):** Long-term mortality and morbidity of transfusion-associated non-A, non-B, and type C hepatitis: A National Heart, Lung, and Blood Institute collaborative study. *Hepatology*; 33(2):455–63.
- Seeff LB(2002):** Natural history of chronic hepatitis C. *Hepatology* ; 36(suppl 1):S35–46.
- Semenkova L, Dudich E, Dudich I, Tokhtamisheva N, Tatulov E, Okruzhnov Y, Garcia-Foncillas J, Palop-Cubillo JA, Korpela T (2003):** Alpha-fetoprotein positively regulates cytochrome c-mediated caspase activation and apoptosome complex formation. *J Biochem.*; 270(21):4388-99.
- Seyed-Moayed Alavian, Ali Kabir , Behzad Hajarizadeh , Mohsen Nayeypour Pharm.D, Bashir Haji Beigi , Taher Doroudi , F.E.Baralle MD (2004):** Combination Therapy of Interferon-alpha and Ribavirin for Chronic Hepatitis C *Hepatitis Monthly* 4, 13-16.

Shepard, CW, Finelli L, Alter MJ (2005):Global epidemiology of hepatitis C virus infection. *Lancet Infect Dis.*; 5: 558-567.

Sherman, M (2005): Screening for hepatocellular carcinoma. *Best Practice Res Clin Gastroenterol.*, 2005; 19: 101-118.

Shimizu A., Shiraki K., Ito T., Sugimoto K., Sakai T., Ohmori S., Murata K., Takase K., Tameda Y and Nakano T. (2002): Sequential fluctuation pattern of serum DCP levels detected by high sensitive electrochemiluminescence system as an early predictive marker for HCC in patients with cirrhosis. *In J. of Molecular Medicine*; 9: 245-250.

Simmonds P (1995): Variability of hepatitis virus. *Hepatology*; 21:570-83.

Simmonds P, Bukh J, Combet C, Deléage G, Enomoto N, Feinstone S, Halfon P, Inchauspé G, Kuiken C, Maertens G, Mizokami M, Murphy D, Okamoto H, Pawlotsky J, Penin F, Sablon E, Shin-I T, Stuyver L, Thiel H, Viazov S, Weiner A, Widell A (2005): Consensus proposals for a unified system of nomenclature of hepatitis C virus genotypes. *Hepatology* 42 (4): 962–73.

Simmonds P, Smith Dp, Mc Omish F, et al. (1994b): identification of genotypes of hepatitis C virus by sequence comparisons in core, E1 and N55 region. *J Gen Virol* ;75: 1053-1061

Simmonds P, Holmes EC, Cha TA et al., (1993): Classification of hepatitis C virus into six major genotypes and a series of subtypes by phylogenetic analysis of the NS-5 region. *J. Gen. Virol.*; 74: 2391–9.

- Sizaret P, Martel N, Tuyns A, Reynaud S (1977):** Mean alpha-fetoprotein values of 1,333 males over 15 years by age groups. *Digestion* 15 (2): 97–103.
- Spear BT (1999):** Alpha-fetoprotein gene regulation: lessons from transgenic mice. *Semin. Cancer Biol.*; 9: 109-116.
- Stedman C (2002):** Herbal hepatotoxicity. *Semin Liver Dis*; 22:195–206.
- Strader DB, Wright T, Thomas DL, et al (2004):** Diagnosis, management, and treatment of hepatitis C. *Hepatology*; 39:1147–71.
- Strecker H. J., Schnorr G. K. and Seidel L (1988):** Solid phase "sandwich"- (2-site IRMA)-assays for CEA, AFP, hCG and TSH employing monoclonal antibodies. *Journal of Analytical Chemistry*; 330:343.
- Taketa K (1990):** Alfafetoprotein: re-evaluation in hepatology. *Hepatology* 12: 1420–32.
- Takada S, Gotoh Y, Hayashi S, et al (1996):** Hepatitis C virus infection and risk of hepatocellular carcinoma among Japanese. *J Nat Cancer Inst*; 88:742-6.
- Tsamandas AC, Syrokosta I, Thomopoulos K, Zolota V, Dimitropoulou D, et al. (2006):** Potential role of hepatic progenitor cells expression in cases of chronic hepatitis C and their relation to response to therapy: a clinicopathologic study. *Liver Int* 26: 817–26.

Valentini P, Cataleta M, Cassani F, et al (1997): Serum autoantibodies in chronic hepatitis C: comparison with autoimmune hepatitis and impact on the disease profile. *Hepatology*; 26:561–6.

Vandelli C, Renzo F, Romano L, et al (2004): Lack of evidence of sexual transmission of hepatitis C among monogamous couples: results of a 10-year prospective follow-up study. *Am J Gastroenterol*.99 (5):855-9.

Vento S, Garofano T, Renzini C, et al (1998): Fulminant hepatitis associated with hepatitis A virus superinfection in patients with chronic hepatitis C.*N Engl J Med* ; 338:286–90.

Wasley A, Alter M.J. (2000): Epidemiology of hepatitis C: geographic differences and temporal trends. *Semin Liver Dis.*; 20 (1):1–16.

Watanabe T, Yamada H, Morimura Y, Abe M, Motoyama T, Sato A (2008): Ovarian Sertoli-Leydig cell tumor with heterologous gastrointestinal epithelium as a source of alpha-fetoprotein: a case report. *J. Obstet. Gynaecol. Res.* 34 (3): 418–21.

Wei-Chen Tai, Tsung-Hui Hu, Jing-Houng Wang, Chao-Hung Hung, Sheng-Nan Lu, Chi-Shin Changchien and Chuan-Mo Lee (2009): Clinical Implications of Alpha-fetoprotein in Chronic Hepatitis C, *Journal of the Formosan Medical Association*, Volume 108, Issue 3: 210-218.

Wilfredo, Canchis P, Gonzalez SA, Isabel Fiel, M, Chiroboga L, Yee H, Edlin BR., et al. (2004): Hepatocyte proliferation in chronic hepatitis C: correlation with degree of liver disease and serum alpha-fetoprotein. *Liver Int.*; 24: 198-203.

Wong T, Lee S.S (2006): Hepatitis C: a review for primary care physicians CMAJ; 174 (5): 649-59.

Wong JB, Davis GL, McHutchinson JG. (2002): Clinical implications of testing viral response during ribavirin and peginterferon alfa-2b treatment for chronic hepatitis C. *Hepatology*; 36: 281A.

Wong I.H.N., Dennis L. Y.M., Lai P. B.S and Johnson P.J. (2000): Relationship of p16 Methylation Status and Serum AFP Concentration in Hepatocellular Carcinoma patients. *Clinical Chemistry*. 46: 1420-1422.

Wu A.H. and Sell S (1990): Markers for hepatocellular carcinoma. *Immunol.Ser*; 53: 43: 403-422.

Wu JT, Book L, Sudar K (January 1981): "Serum alpha fetoprotein (AFP) levels in normal infants". *Pediatric research* 15 (1): 50–2.

Yamaguchi S, Kubo K, Fujimoto K, Honda T, Sekiguchi M, Sodeyama T. (1997): Analysis of bronchoalveolar lavage fluid in patients with chronic hepatitis C before and after treatment with interferon alpha. *Torax*; 52: 33-37.

Yang FY, Li MS, Li PF, He SP, Du GG, Li G. (2002): The intracellular mechanism of alpha-fetoprotein promoting the proliferation of NIH 3T3 cells. *Cell Res.*; 12(2):151-6

Yasushi Tamura, Satoshi Yamagiwa, Yohei Aoki, So Kurita, Takeshi Suda, Shogo Ohkoshi, Minoru Nomoto, Yutaka Aoyagi (2009): Serum Alpha-Fetoprotein Levels During and After Interferon Therapy and the Development of Hepatocellular Carcinoma in Patients

with Chronic Hepatitis C *Digestive Diseases and Sciences J* ;54 :2301-2540.

Yin L, Lynch D, Ilic Z, Sell S (2002): Proliferation and differentiation of ductular progenitor cells and littoral cells during the regeneration of the rat liver to CCl₄/2-AAF injury. *Histol Histopathol* 17: 65–81.

Yoshida S, Kurokohchi K, Arima K, Masaki T, Hosomi N, Funaki T, et al. (2002): Clinical significance of lens culinaris agglutinin-reactive fraction of serum alpha-fetoprotein in patients with hepatocellular carcinoma. *Int J Oncol*; 20: 305-309.

Yuen MF, Lai CL.(2003): Screening for hepatocellular carcinoma: survival benefit and cost-effectiveness. *Ann Oncol*; 14:1463-1467.

Zignego AL, Brechot C (1999): Extrahepatic manifestations of HCV infection: facts and controversies. *J Hepatol* ;31:369–76.

Zarski JP, Mc Hutchison J, Bronowicki JP, et al (2003): Rate of natural disease progression in patients with chronic hepatitis C. *J Hepatol*;38:307-14.

Zeuzem S, Sarrazin C, Rouzier R, Tarral A, Brion N, Forestier N (2005): Anti-viral activity of SCH 503034, a HCV protease inhibitor, administered as monotherapy in hepatitis C genotype-1 (HCV-1) patients refractory to pegylated interferon (PEGINF-a). *Hepatology*; 42: 233A.

Zoli M., Magalotti D., Bianchi G., Marchesini G. and Pisi E. (1996):
Efficacy of a surveillance program for early detection of HCC. *Cancer*;
78: 977-985.